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Extreme Drought Spreads into North Georgia

By David Emory Stooksbury University of Georgia

Extreme drought conditions now cover most of Georgia south of the mountains. Extreme drought is the next to highest drought category. All counties in Georgia are now classified as being in moderate, severe or extreme drought.

All counties south of Carroll, Douglas, south Fulton, Clayton, Henry, Rockdale, Walton, eastern Barrow, eastern Jackson, Madison, and Elbert counties, inclusive, are now classified in extreme drought.

Across north Georgia, the counties of Dade, Fannin, Union, Towns, Rabun, Gilmer Lumpkin, White, Habersham, Pickens, Dawson Hall, Forsyth, north Fulton and north Gwinnett are classified in moderate drought. Moderate drought is the lowest drought category.

The remaining counties in north Georgia are classified as being in severe drought.

Soil moisture levels in extreme drought counties are between the first and fifth percentile. At the first percentile the soils in late August would have more moisture 99 out of 100 years. At the fifth percentile the soils would have more moisture 95 out of 100 years.

Stream flows are extremely low across Georgia.

In north Georgia, U.S. Geological Survey stream gages are reporting daily record-low flows (year of previous record low flow) on the Chattooga River near Clayton (2000), the Chattahoochee River near Leaf (1957) and Cornelia (2007), the Cartecay River near Ellijay (1953), the Coosawattee River near Pine Chapel (1977), the Etowah River near Canton (2002), Sweetwater Creek near Austell (2002), the Oconee River near Athens (1987) and near Penfield (1987), the Apalachee River near Bostwick (1981), the Broad River near Bell (1988), Cedar Creek near Cedartown (2007), Murder Creek near Eatonton (2007), and the Flint River near Griffin (1993).

Across south Georgia, USGS stream gages reporting daily record-low flows include the Oconee River near Dublin (2002), Turkey Creek at Byromville (2001), Upatoi Creek near Columbus (1987), Muckalee Creek near Leesburg (2000), Pachila Creek near Edison (2000), the Flint River at Albany (2000) and near Newton (2000), the Little River near Adel (2002), the Ohoope River near Reidsville (1980), the Ocmulgee River at Lumber City (2000), the Altamaha River near Baxley (2000) and at Doctortown (2000), and the Satilla River near Atkinson (1990).

The Ogeechee River near Eden is at an all time record low flow of 57 cubic feet per second.

Across extreme south Georgia, the North Prong of the St. Mary's River at Moniac, Okapilco Creek near Quitman, and Spring Creek near Iron City have stopped flowing.

Groundwater levels in the coastal plain are at or near record-low levels for all long-term USGS monitoring wells. Record low monthly groundwater levels were reported in the Upper Floridian Aquifer (Mitchell, Lauren, and Toombs counties) and the Clayton Formation (Randolph County).

Major reservoirs on the Chattahoochee, the Savannah and the Etowah rivers are dropping. The Chattahoochee River reservoirs, Lakes Lanier, West Point and Walter F. George, are entering Zone 3. The Savannah River reservoirs, Lakes Hartwell and Clarks Hill, are entering level two. Lake Allatoona on the Etowah River is currently in Zone 1.

Recent weeks have seen wildfire activity well above normal across the entire state. The Georgia Forestry Commission rates the wildfire danger from high to extreme. Since Aug. 1, more than 2,230 acres have been scorched across Georgia. This is double the long-term August average.

GFC reports that since Jan. 1, more than 448,600 acres have been scorched by wildfires in the state. Increased wildfire risk remains, and precaution must be exercised when doing any activity that could generate sparks. Preventable sources of wildfires include backyard grills, campfires and cigarettes, and also over-heated lawn equipment, farm equipment and electrical lines.

The outlook for near-term drought relief is not promising. Unless Georgia experiences some tropical weather over the next few months, the state can expect below normal rainfall and above normal temperatures. Without some tropical rains, soils are expect to continue to dry out, stream flows, groundwater levels and reservoir levels are expected to continue to drop, and wildfire potentials are expected to remain high to extreme.

Over the next three to nine months, drought conditions may persist. Computer models and historical climate analysis are indicating the return of the La Niña ocean-atmosphere pattern. Typically a La Niña winter and spring means below normal rainfall and above normal temperatures. While a typical La Niña winter is very nice in Georgia, it also means that the much needed moisture recharge during the winter and spring will not typically be large enough to get the state through the next summer without drought conditions continuing.

Up-to-date information on dry conditions across Georgia can be found at www.georgiadrought.org. Updated weather conditions can be found at www.georgiaweather.net.

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